



HANFORD CULTURAL AND HISTORIC RESOURCES PROGRAM

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### 2000

...will continue to focus on preservation of the Hanford Site's cultural and historic resources. Cultural resource protection on the Site is governed by several federal laws, including the National Historic Preservation Act.

Section 106 of this act requires the Department of Energy to conduct cultural resource reviews of all Hanford Site projects that will disturb ground and/or demolish existing structures.

The reviews ensure that prehistoric and historic sites, traditional use areas, and existing structures eligible for the National Register of Historic Places are considered before the areas are affected by proposed projects.

Section 106 activities are important components of a cultural resource management program at Hanford. See page 3 for an update on the Advisory Council on Historic Preservation's recent changes to these federal regulations and how they affect Hanford Site projects.

Dee W. Lloyd, Manager

DOE Hanford Cultural and Historic
Resources Program

# CONSTRUCTION IN THE DESERT: AN OLD MOVIE AND NEW BOOK

At the beginning of the year 2000, it's hard to imagine living on Hanford's arid lands in a construction camp, getting paid \$1/day to lay concrete, sleeping in tents or barracks, eating in mess halls, and dancing to big bands in a specially built auditorium, all while a world war rages.

That's the life the 1944 black and white silent film "Construction in the Desert" portrays, the early Hanford days when 51,000 citizens worked an average 54 hours per week to build the first nuclear reactors. "All these people were brought here for one reason and one reason alone: plutonium production," said Barb Kubick a local historian who narrated the film for viewers at its first public showing in Kennewick in October. "Ninety-nine percent of people had no idea what they were doing here," she said.

Kubick also described the difficulty at the time in recruiting workers (tinsmiths, millwrights, and pipefitters, as well as food service workers, nurses, and secretaries), how Hanford competed with Seattle shipyards and the draft.

Although the film presents a lot of footage on the everyday lives of Hanford Construction Camp workers, viewers also get a chance to see a slice of the huge concrete reactors and other structures in the making.

As described in the draft of a new book, *History of the Plutonium Production Facilities at the Hanford Site Historic District (1943-1990)*, to be published by the U.S. Department of Energy, functional, unadorned concrete and steel were the most commonly used materials at the Site. "In this industrial environment, a building was beautiful to the degree it was functional."

The book's five chapters provide historic narratives on such topics as construction history, reactor operations, site security, military operations, and worker history as well as make recommendations for future uses of Hanford Site structures.

Beginning February 1, the Department is seeking public review and comment on the book, which can be accessed on the Internet at www.hanford.gov/docs/rl-97/index.htm.

Comments are sought particularly related to the accuracy of the information included in the book and the effectiveness of its graphics. Any additional information that sheds light on the Hanford Site, especially its operational history from 1943-1990 also is welcome.

If you don't have Internet access at home, the report can be accessed via the Internet at most public libraries and at DOE's Public Reading Room, Consolidated Information Center, Washington State University, Tri-Cities Campus, 2770 University Drive, Room 101L, Richland, Washington (372-7443). A hard copy of the book also is available at the reading room.

Please submit comments to the Hanford Cultural and Historic Resource Program via email to Ellen Prendergast (ellen\_I\_prendergast@rl.gov) or by letter to Dee W. Lloyd, Manager, Hanford Cultural and Historic Resources Program, U. S. Department of Energy, 825 Jadwin Avenue, AF-58, Richland, Washington 99352.

# HANFORD HISTORY PROFILE

### THE ONCE AND FUTURE B REACTOR

At a bend in the Columbia River 30 miles north of Richland stand nine retired nuclear reactors, including B Reactor (105-B Building), the world's first full-scale plutonium production reactor. You can see the reactor from Highway 240 on either side of the Vernita Bridge.

B Reactor was the first of Hanford's original three reactors to be built during the rush of the secret wartime Manhattan Project. It took 11 months and some 50,000 construction workers, scientists and engineers to fabricate the reactor and support build-

ings. Construction began in August 1943 and required a reported 390 tons of steel, 17,400 cubic yards of concrete, and 121,000 concrete blocks.

By September 26, 1944, the reactor was ready to start. Historians note that Enrico Fermi, the Italian physicist—who in 1942 with a team of scientists created the first controlled nuclear chain reaction—looked on with a slide rule in hand as operations staff powered up the reactor.

The B Reactor produced plutonium that was used in the world's first atomic bomb. Soldiers and scientists tested the bomb at the Trinity Site in New Mexico in July 1945. Less than a month later, a second atomic bomb made of Hanford plutonium was detonated over Nagasaki, Japan, helping to end World War II and begin the nuclear age.

B Reactor continued to produce plutonium for nuclear weapons during Cold War tensions between the United States and the Soviet Union. The U.S. Department of Energy decommissioned the reactor in 1968.

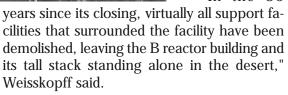
### THE FUTURE

Although many Hanford Site historic buildings have been torn down, B Reactor currently is listed in the National Register of Historic Places and was named a National Historic Civil Engineering Landmark by the American So-

ciety of Civil Engineers.

"Hanford's B Reactor is undoubtedly one of America's landmark treasures," said president of the B Reactor Museum Association Gene Weisskopf. The museum association was founded in 1991.

"In the 30



In 1999, the Department and its contractors applied for a "Save America's Treasures" Millennium Grant to fund renovation of the historic B Reactor as a museum.

The reactor is not yet open to the public, but the Department of Energy's *Final Hanford Comprehensive Land-Use Plan Environmental Impact Statement* recommends creating a B Reactor museum. The plan also proposes a feasibility study to estimate the cost of creating the museum.

If you're interested in joining the B Reactor Museum Association, see the association's web site (www.owt.com/brma) or write to Weisskopff, at genew@owt.com. Some current association members helped Enrico Fermi start up the reactor for the first time in 1944.



## CULTURAL RESOURCE MANAGEMENT

# How Changes to the Cultural Resource Review Process Affect Site Projects



Cultural and historic resources on the Hanford Site are regulated by federal laws, including the National Historic Preservation Act. The Advisory Council on Historic Preservation publishes regulations that implement the requirements outlined in the Act.

Recently, the Council issued changes to federal regulation 36 CFR Part 800 - Protection of Historic Properties. This regulation details the National Historic Preservation Act's Section 106 process or what we call the cultural resource review process.

Cultural resources reviews must be conducted before the Department and its contractors can conduct any project that would disturb Hanford lands or alter or demolish buildings. These reviews are required to identify properties that may be eligible for or listed in the National Register of Historic Places within the proposed project area and to evaluate the effect of a proposed project on the property.

The Hanford Cultural Resources Laboratory (Pacific Northwest National Laboratory) and the Environmental Restoration Contractor (Bechtel Hanford, Inc.) conduct Section 106 cultural resource reviews for the Department on Hanford lands. In 1999, staff conducted 205 reviews. In 1998, 150 reviews were requested.

Recent modifications to the Section 106 regulations, effective June 1999, increased the State Historic Preservation Officer's (SHPO) involvement in decision making. The regulations now require the SHPO to have 30 days to review and comment on Hanford cultural resource review findings that potentially could affect historic properties.

Review letters completed by the Cultural Resources Program are now submitted for review to the SHPO by DOE's Richland Operations Office with supporting documentation. No ground-disturbing project activities can proceed until the SHPO has concurred or 30 days have elapsed.

The regulations emphasize Native American Tribal involvement. The Hanford Cultural Resources Program has steadily increased Native American Tribal involvement in Hanford activities, including Section 106 projects. The Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, Nez Perce Tribe, and Wanapum Band are notified of reviewed projects with the potential to affect historic properties and are encouraged to participate. Past participation has included site visits, land surveys, issues meetings, and consultation.

New regulations also encourage federal project staff to involve the Cultural Resource Program early in making decisions on project location, design, and construction. This can save time and resolve issues that could complicate a project if reviews are requested at the last minute.

Projects must submit cultural review requests as soon as feasible to allow appropriate time to complete the process as outlined in the *Federal Register*. Because of the new regulations, the Cultural Resources Program now requires projects to submit review requests no later than 45 days before the anticipated project start date.

In addition, the new regulations combined the *No Effect* and *No Historic Properties* categories. This change has allowed for a first-step determination to be made on whether a project/undertaking has potential to affect historic properties. Based on certain criteria (disturbance, location, nature of project, known cultural resources) a project can be determined to have *No Potential to Affect Historic Properties* by the Site Preservation Officer (DOE/RL). If this determination is approved, the project can proceed as planned.

For more information on the Section 106 regulations, see the Advisory Council on Historic Preservation's web site at www.achp.gov. You can obtain a copy of the cultural resources review request form from Laurie Hale at 376-6098 or from the Internet: sbms.pnl.gov/standard/090906e010.htm (Jet Form RL-665).

## CULTURAL RESOURCES

#### CALENDAR

- January December 2000–The B Reactor Museum Association meets the second Monday of each month at 5:00 PM at the Richland Public Library. The public is invited to attend the meetings, become a member of the group, or donate their reactor and Hanford-related artifacts or mementos. Contact Gene Weisskopf at 509-946-1316 or at genew@owt.com.
- February 1 April 30, 2000–A draft of *The History of Hanford Site Facilities* (1943-1990) is available for public review and comment on the Internet (www.hanford.gov/docs/rl-97-1047/index.htm).
- March 6, 2000

  —The Mid-Columbia Library will host a program entitled "Ezra Meeker,
  Those Terrible Treaties," a living history lecture in which historian Tom Moak will
  discuss Native American treaties. The lecture begins at 7:00 p.m. in the Mid-Columbia Library, Kennewick. For information, call Linda Lunde at 509-738-7878.
- March 22, 2000–Carl Allen will present "Woody Guthrie and the Columbia River Songs" at the Richland Public Library at 7:00 p.m. The event is sponsored by the Richland Public Library, CREHST, and the Washington Commission for the Humanities.
- March 2000–The East Benton County Historical Museum will host an exhibit on "Local Women in History," celebrating Women in History Month. See the exhibit at the museum. Call 509-582-7704 for more information.
- April 6-8, 2000–Northwest Anthropology in the 21<sup>st</sup> Century, Cavanaugh's Inn at the Park, Spokane, Washington. Conference web page: http://class.ewu.edu/ class/anthro/nwac/home.html.

### Who's Who

This newsletter is published quarterly by the U.S. Department of Energy, Richland Operations Office. For more information on the Hanford Cultural and Historic Resource Program, see www.hanford.gov/doe/culres/index.htm, or write or call the following individuals:

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